

REMARKS

In the Office Action, claims 1-5, 7 and 20-22 were rejected as anticipated by U.S. Patent No. 6,890,340 to Duane, claims 9-12 were rejected as anticipated by WO99/25252 to Bosma, claims 13-15 were rejected as anticipated by U.S. Patent No. 6,994,092 to van der Burg et al, and claim 6 was rejected as obvious over Duane in view of Bosma.

Claims 8 and 16-19 were indicated as being allowable if rewritten in independent from to include the limitations of the base and intervening claims.

The Duane patent discloses a protection element 40, which may be a filter device, comprising a tubular braid 41 formed into a shape of two nested cones of different heights and joined at their bases to form ring portion 42. Proximal and distal apices 44, 46 may include metal or plastic tubular bands. The distal and proximal apexes are both slidably coupled to shaft 35. Displacement of apex 46 toward distal apex 44 by actuator 50 reduces the diameter of the ring portion 42 to move it to a closed position.

The Duane patent does not anticipate claim 1. In Duane, the filter is held by shaft 35 in the vessel in an open configuration. That is, the filter is attached to the shaft, which delivers the filter and remains in position attached to the filter during the procedure. At the end of the procedure, shaft 35 and the attached filter are withdrawn together. In contrast, in the present invention recited in claim 1, the filter is movable between a collapsed position for delivery to the vessel and an expanded placement position wherein the filter remains in the expanded position in the vessel after a delivery device for the filter is withdrawn from the vessel.

Moreover, claim 1 recites 1) the filter includes a plurality of vessel engaging members to engage the vessel wall to secure the filter within the vessel and 2) such engaging members secure the filter within the vessel when released from the delivery device and left within the vessel after withdrawal of the delivery device from the vessel. These recitations are not disclosed or suggested in the Duane filter/shaft unit. Duane lacks vessel engaging members, let alone vessel engaging members securing the filter when the delivery device is withdrawn. There would also be no reason to modify the Duane filter to provide such vessel engaging members since it is not a stand alone device but rather utilizes

the delivery shaft to hold the filter in place. Consequently withdrawal of the rejection of claim 1 is respectfully requested.

Dependent claim 6 was rejected as obvious over Duane and Bosma. Claim 6 has been canceled without prejudice.

New dependent claim 23 recites the filter comprises a plurality of elongated struts and in the mounting region the struts have a curved region which curves in a distal direction and then curves back toward a proximalmost end.

Independent claim 20, as amended, recites the step of withdrawing the delivery member from the vessel leaving the filter secured within the vessel in the large diameter placement configuration with a plurality vessel engaging members of the filter engaging the vessel wall. As discussed above with respect to claim 1, in Duane, the delivery shaft 35 is attached to the filter so when it is withdrawn, the filter is withdrawn with it. Also, Duane lacks the vessel engaging members to secure the filter to the vessel as it is not secured to the vessel but held inside the vessel lumen by the shaft. Consequently, the rejection of claim 20 as anticipated by Duane should be withdrawn.

Applicants submit that the rejection of claims 1 and 20 should be withdrawn. Claims 2-5, 7, 8 and 23 depend from claim 1 and claims 21-22 depend from claim 20 and are therefore believed patentable for at least the same reasons that claims 1 and 20 are believed patentable.

Independent claim 9 was rejected as anticipated by Bosma. Claim 9 has been amended to more clearly point out the relationship of the mounting portion and the filtering portions. As amended, the claim defines the proximalmost end point of the mounting portion being proximal of the proximalmost end point of the first converging region. The distalmost endpoint of the second converging region is distal of both proximalmost end points. As can be appreciated by the Examiner's labeled drawing of Bosma in the Office Action, the proximalmost end point of the mounting portion is proximal of one converging region and distal of another converging region. This results in each converging regions being spaced radially outwardly from the mounting portion. The positioning of the mounting portion proximalmost end point proximal of the proximalmost end point of the first converging region in the invention of claim 9 results in the filter portion being spaced radially and axially inwardly

so the particles are advantageously directed to the center. Consequently, the rejection of claim 9 should be withdrawn.

Claims 10-12 depend from claim 9 and are therefore believed patentable for at least the same reasons as claim 9 is believed patentable.

Claim 13 was rejected as anticipated by Van der Burg. Claim 13 has also been amended to more clearly point out the relationship of the mounting portion and the filtering portions. Claim 13 recites that the first converging region at the distal filter portion has a proximalmost end point, the second converging region at the proximal filter portion has a distalmost end point, and the struts further form a mounting portion having a proximalmost end point proximal of the proximalmost end point of the first converging region. As can be appreciated by the Examiner's labeled drawing of Van der Burg in the Office Action, in Van der Burg the proximalmost end point of the mounting portion is proximal of one converging region and distal of another converging region. This results in each converging region being spaced axially outwardly from the mounting portion. Thus, claim 13 is not anticipated by Van der Burg.

Claims 14-19 depend from claim 13 and are therefore believed patentable for at least the same reasons that claim 13 is believed patentable. Also note claims 16-19 were found allowable by the Examiner.

Applicants respectfully submit that this application is now in condition for allowance. Prompt and favorable reconsideration of the present application is respectfully requested. The Examiner is invited to contact the undersigned should the Examiner believe it would expedite prosecution.

Respectfully submitted,

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